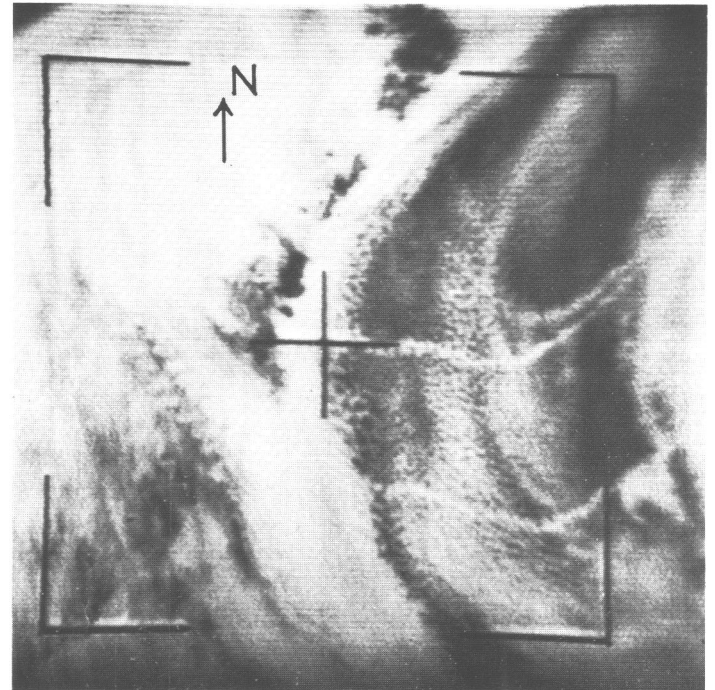
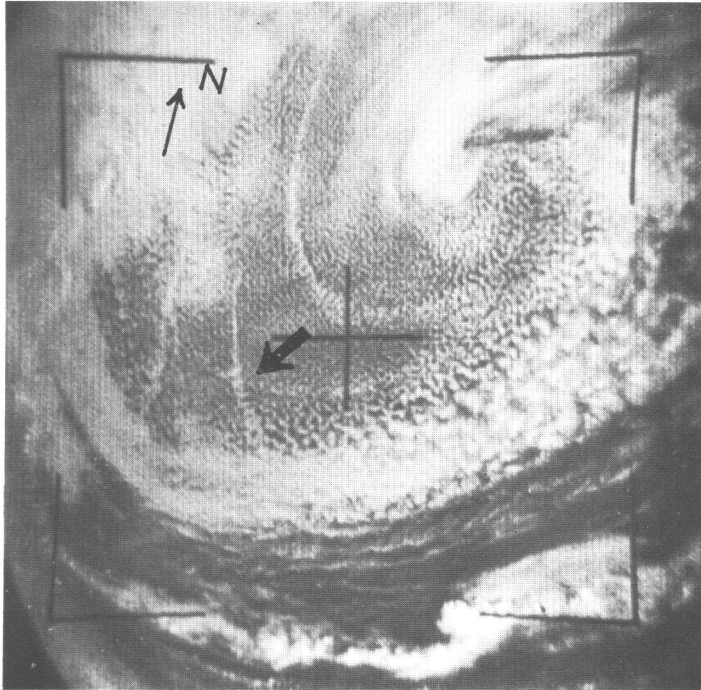


PICTURE OF THE MONTH



(a) TIROS VII, Pass 997/997, Camera 2, frame 23, August 25, 1963, 2037 GMT

(b) TIROS VII, Pass 5782/5773, Camera 1, frame 29, July 13, 1964, 2226 GMT

These TIROS VII photographs each contain features in the cellular cloud pattern that are not only unusual but also difficult to explain. The unusual features common to both are the narrow curved bands of clouds that appear to be embedded in the areas of cellular structure. Both pictures were taken over the western North Pacific Ocean during the summer; photograph (a) is centered near 38° N., 167° E., photograph (b) near 49° N., 155° E. North is indicated by the thin arrows.

The clouds in photograph (a) were associated with a deepening extratropical cyclone of moderate intensity (994 mb.). The somewhat irregular cloud band near and roughly parallel to the bottom of the picture is believed to coincide with the surface position of the cold front, and the cumuliform cloudiness visible to the north is within the cooler air to the rear of the front. The narrow, smoothly curved cloud lines apparently represent enhanced

convection that is contained within the layer of low-level cumuliform cloudiness. While these narrow lines appear to be associated with the circulation about the cyclone, two of them are observed to intersect (heavy arrow)! Therefore, the lines cannot represent only a simple, cyclonically spiraling streamline pattern.

The cloud lines in photograph (b) are less smoothly curved, suggesting aircraft condensation trails. However, the fine structure of these lines appears almost identical with that of the lines in picture (a), and the lines seem to be at the same altitude as the adjacent low-level strato-cumulus masses. The synoptic analyses suggest nothing unusual. The surface map shows the area was in a weak easterly-to-southeasterly flow; the 500-mb. chart indicates a nearby col with generally light winds.

Photograph (b) was suggested for use by C. J. Bowley of ARACON Geophysics Company, Concord, Mass.